

# FACT SHEET



## RURAL CENTER for AIDS/STD PREVENTION

A Joint Project of

INDIANA UNIVERSITY, PURDUE UNIVERSITY,  
AND TEXAS A&M UNIVERSITY

### AIDS and Sexually Transmitted Diseases in the Rural South

Since the mid-1980's more cases of AIDS have been reported in the South<sup>a</sup> than in any other region of the United States,<sup>1</sup> and the rise of the epidemic in rural<sup>b</sup> America has been widely recognized<sup>2-4</sup> and documented (see other RCAP Fact Sheets, especially "HIV/AIDS in Rural America," 1996). Rural Southerners are, therefore, assumed to be especially at risk. Our understanding of the unique risks of rural Southerners is limited, however, because few surveillance studies have targeted this population, necessitating a review of other less narrowly targeted studies of the South, rural populations, and selected minorities.

#### Most rural AIDS cases are in the South

In 1996<sup>c</sup> there were nearly four to five times as many rural AIDS cases in the South as in any other region of the United States; among rural blacks the number of AIDS cases is 9 to 44 times higher in the South.<sup>4</sup> More than half of all rural cases (54%) reported through 1997 were in the southern region.<sup>5,d</sup> Just over 1 in 50 (2.2% of) child-bearing women in five rural Georgia hospitals from 1993 to 1997 were HIV positive.<sup>6</sup> Three quarters of patients attending one of four urban academic ID clinics in North Carolina, South Carolina, Alabama, and Florida in 1997 were from rural zip codes.<sup>7</sup>

Given that ulcerative sexually transmitted diseases (STDs) promote HIV infection and that sexual risk taking leads to both kinds of infections, the high rates of STDs in the rural South are also of concern. For example, in 1991 through 1993, syphilis rates were markedly higher in North Carolinian rural counties compared to NC urban counties.<sup>8</sup>

#### Rural Southern heterosexuals, women, and African Americans are at disproportionately higher risk

The South has been especially affected by the "second wave" of the HIV/AIDS epidemic—affecting mostly young, nonwhite, heterosexual women not living in "first wave" epicenters.<sup>9</sup> Women in the South are especially at risk for HIV/AIDS.<sup>7, 9-14</sup> Heterosexual sex accounted for 18% and 60% of AIDS cases reported in 1999 among rural Southern males and females, respectively compared to 40% in the combined U.S. population.<sup>2</sup> Although a substantial proportion of rural people with AIDS (PWAs)

have used injection drugs, this behavior is less common than in urban settings and accounts for a smaller proportion of HIV transmission in rural settings.<sup>15, 16</sup> Non-injection drug use, particularly alcohol and swapping sex for crack cocaine, however, has been clearly linked to HIV transmission in studies of rural PWAs in Georgia.<sup>17, 18</sup>

In 2000, the AIDS case rate among African Americans in the U.S. was over nine times higher than among whites—74.2 vs. 7.9 per 100,000, 21 times greater among African American females than among white females (45.9 vs. 2.2).<sup>1</sup> African Americans in rural Southern states are particularly at risk. The HIV seroprevalence among all teens visiting Mississippi STD clinics from 1988 to 1990 was 3.5 times higher among African Americans than among whites.<sup>19</sup>

The risk is even higher for Southern black women. Among both Job Corps applicants<sup>12</sup> (1990-1996) and 18-21-year-old military recruits<sup>20</sup> (1993-1998) the prevalence of HIV infection was higher among African American females from the South than among any other group. In six southern states that are mostly rural and largely black and poor (Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina), at least 70% of people with HIV are black and 25% are female.<sup>7</sup> Similar epidemiological studies in various rural Southern states (Alabama, Georgia, Mississippi, North Carolina, and Virginia) have revealed similar rates of HIV infection among African American women.<sup>7, 10, 11, 21-23</sup>

The incidence of AIDS in the U.S. has decreased dramatically since 1992, but the percentage decreases have been the smallest among African American women, Southern women, and among both men and women infected heterosexually.<sup>20</sup>

#### AIDS is a "rapidly rising epidemic in rural America" <sup>3</sup>

Between 1991 and 1995, the number of AIDS cases in rural America increased by 80%.<sup>24, 25</sup> In 1994 most of the top 25 counties experiencing the most rapid increases in AIDS cases were rural.<sup>26</sup> By 1997 rural transmission accounted for fully one in ten (10.2%) AIDS cases in the U.S.<sup>27</sup> During 1999 and 2000, rural transmission has leveled off at 7.3% of all cases.<sup>1</sup> In individual rural low-prevalence areas, HIV infections can spread rapidly (forming "clusters")

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when a single HIV-infected individual is introduced into one of the limited sexual contract networks typical in these settings.<sup>28, 29</sup>

Rural Americans report increased sexual risk taking. Condom use at last intercourse (with both main and non-main partners) has been found to be lower in rural areas than in metropolitan areas.<sup>30, 31</sup> Rural respondents to the 1992 National Health and Social Life Survey were about 70% less likely than urban respondents to report a change in sexual behavior because of AIDS.<sup>32</sup> Rural male respondents to the 1997 Youth Risk Behavior Survey were more likely to have ever had sexual intercourse and not to have used a condom at last intercourse compared to more urban respondents.<sup>33</sup>

### More AIDS cases are reported in the South than in any other region

Since the mid-1980's the South has reported more AIDS cases each year than any other region. Southerners accounted for 39% of all U.S. cases reported from 1996 to 2000.<sup>1, 34</sup> In 1999 African Americans alone constituted more than half (53%) of all cases of AIDS in the South.<sup>2</sup>

STD rates are also highest in the South. Syphilis rates in the South have consistently been the highest among all regions of the U.S., and they remain high in the South in spite of the fact that the national syphilis rate is at an all-time low<sup>35</sup> (see Figure below). Chlamydia and gonorrhea rates are also highest in the southern states.<sup>35</sup>

### Up to two thirds of rural HIV positives were infected locally

Many rural men who have sex with men (MSM) tend to engage in risk behavior in urban centers, and many MSM who are rural natives choose to return to their rural homes from urban centers after their HIV diagnosis.<sup>16</sup> On the other hand, a substantial proportion of individuals infected in rural settings migrate to cities, perhaps to obtain better health care.<sup>36</sup> Researchers have therefore questioned what level of rural HIV prevalence is truly accounted for by risk behavior in the rural environment. Almost two-thirds (61%)<sup>e</sup> and 48% of HIV-infected individuals living in rural areas of Alabama and North Carolina respectively report that they believe they were infected in rural settings.<sup>17, 37</sup> In a third study of HIV-infected individuals in four South-eastern states, 27% were apparently infected locally.<sup>16,f</sup>

### Medical Care Access is Limited

For a variety of reasons, HIV-positive rural Southerners often have limited access to health care. HIV-positive individuals in the North Carolina, South Carolina, Alabama, and Florida study<sup>7</sup> described above (which was 75% rural) had to travel an average of 86 miles roundtrip to their infectious disease clinic provider. One in ten of these patients had been refused care by a physician, and more than a third of those who needed dental care did not receive it. One third of the sample also reported needing help paying for prescription medication.

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### Primary and secondary syphilis—Counties with rates above and counties with rates below the Healthy People year 2000 objective: United States, 1999



Syphilis rates in the South have consistently been the highest among all regions of the U.S., and they remain high in the South in spite of the fact that the national syphilis rate is at an all-time low (Cates, 1999)

Division of STD prevention, *Sexually Transmitted Disease Surveillance, 1999*. Department of Health and Human Services, Atlanta: Centers for Disease Control and Prevention (CDC), September 2000.

## Rural Prevention is Challenging

Implementing prevention programs in the rural South is often a daunting task. Rural AIDS educators face a complex set of cultural barriers that can include lack of transportation, prejudice against HIV-infected individuals, ignorance, racism, homophobia, inadequate drug education, lack of resources and expertise, increased demand for conformity, lack of tolerance of diversity, and a sense of isolation from the epidemic (c.f., 38-40). Most individuals in a rural community are either related and/or acquainted, making it essentially impossible to seek information or testing anonymously. Attempts to implement prevention programs have often led to rancorous political controversy because of conflicts with local conservative moral and religious values. Perhaps more importantly, the real or perceived threat that "sex education" might lead to controversy has perhaps the greatest impact because it can cause school board members and other officials to avoid the issue entirely. On the other hand, experience has shown that individual rural communities can be easier to deal with than some larger cities because there is less bureaucracy, because there are vocal and respected leaders who will champion the cause, or even because of local events such as a recent rise in teen pregnancy or STDs.

Conducting research to develop and test the effectiveness of risk reduction programs in rural settings is particularly challenging. Rural communities tend to distrust outsiders and their motives. Building a trusting relationship with a community often requires years of effort. Funds for rural prevention studies are also very limited, and the scattered population can make it difficult (and therefore expensive) to obtain sample sizes adequate for statistical analysis.

For these and many other reasons, there are few well-designed and carefully evaluated HIV/pregnancy prevention programs that target rural Southerners. Model programs worthy of note include Teen Talk (Texas),<sup>41</sup> School/Community Sexual Risk Reduction (South Carolina),<sup>42</sup> and Students Together Against Negative Decisions—STAND (Georgia).<sup>43, 44</sup>

### Summary

The studies reviewed above demonstrate that HIV/STD is a substantial problem in the rural South. Since the mid-1980's the South has reported more cases of AIDS than any other region of the U.S, and the number of rural AIDS cases in the South has outstripped all other regions by several fold. HIV infection in the South is a typical "second wave" phenomenon, affecting disproportionate numbers of females, youth, minorities, and heterosexuals. And, contrary to common perception, a large proportion—up to two-thirds—of HIV-related risk taking leading to HIV infection occurs in the local rural setting. These disturbing trends send a clarion call to researchers, prevention specialists, and policy makers to address the HIV-related needs of the rural South.

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## Footnotes

- a We employ the CDC surveillance system's definition of the "South" which includes 16 states and the District of Columbia.
- b The term *rural* is used throughout, regardless of differences in the way various studies define the term. Note that Centers for Disease Control and Prevention generally refer to rural as "non-MSAs" (non-Metropolitan Statistical Areas, population less than 50,000.) Therefore, some rural studies include small cities as well.
- c All data presented are the most recent we have identified.
- d Rural AIDS rates, however, were similar among the regions of the U.S., reflecting the fact that the South is more rural than other regions.
- e Among those reporting a specific likely place where they were infected.
- f 15% of the sample in this study lived in "small cities" of less than 250,000.

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